

Section 1. Chemical Product and Company Identification

Product Name **Black Toner For FS-C1020MFP**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date April 27, 2010

Section 2. Composition/Information on Ingredients

Substance or preparation: Preparation

CAS No.	(Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	Weight %
	Polyester Resin 1			40-60
	Polyester Resin 2			20-40
(CAS No. 1333-86-4)	Carbon black	3.5mg/m ³	3/5mg/m ³	1-10
	Wax			1-5
	Silica			1-5
	Organic Salt			1-5

This product does not contain any of the following substances as ingredients. And if it contains any impurities, it does not exceed any of the thresholds of RoHS: Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE).

Section 3. Hazards Identification

Hazardous Ingredients Information

Chemical Name	Carbon Black				
CAS Number	1333-86-4	EEC Number	215-609-9	DFG-MAK	III 3B
OSHA	3.5mg/m ³	ACGIH-TLV	3.5mg/m ³	CA Proposition 65 (USA) Listed	
NTP	Not Listed	IARC Monographs	Group 2B	OELs-TWA(Australia) 3.0mg/m ³	
Symbol (EU)	Not Listed	R-Phase (EU)	Not Listed		

Most Important Hazards

Adverse Human Health Effects There are no significant hazards expected with intended use.
Environmental Effects There are no significant hazards expected with intended use.
Physical and Chemical Hazards There are no significant hazards expected with intended use.
Specific Hazards Dust explosion (like most finely grained organic powders).

Main Symptoms

Acute Inhalation Toxicity Exposure to excessive amount of dust may cause physical irritation to respiratory tract.
Acute Oral Toxicity Low acute toxicity in animal experiment.
Acute Eye Irritation May cause slight transient irritation.
Acute Skin Irritation May be non-irritant

Sensitization

From test no apparent significant hazards are expected. (Only few cases reported on incidental allergy-related conjunctivitis or dermatitis).

Chronic Effect

Slight pulmonary fibrosis has been reported in rats upon chronic inhalation exposure to a toner at 4mg/m³ every day for 2 years. No pulmonary change was found at 1mg/m³. These findings show that exposure to excessive amounts of powder may cause damage to lungs. However, normal use and handling of this product as intended, does not result in inhalation of excessive amounts of powder.

Carcinogenicity

Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat. But oral/skin test does not show carcinogenicity. The toner containing carbon black did not show carcinogenicity in chronic inhalation exposure test in use of rat.

The Classification of the Chemical Product

This preparation is not classified as dangerous according to Directive 1999/45/EC.

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air and gargle with plenty of water. Seek medical treatment in case of such a symptom as coughing.
Skin Contact	Wash with soap and water.
Eye Contact	Flush with water immediately and seek medical treatment if irritating.
Ingestion	Drink several glasses of water to dilute ingested toner. Seek medical treatment.

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, Powder, CO ₂ or Dry Chemical Extinguisher.
Extinguishing Media to Avoid	Not applicable.
Specific Hazards	Can form explosive dust-air mixtures when finely dispersed in air.
Specific Method	No special fire protecting method is required. Sprinkling or fire extinguishers can be used.
Protection of Fire-Fighters	Wear gloves, glasses, a mask if necessary.

Section 6. Accidental Release Measures

Personal Precautions	Do not breathe in dust.
Environmental Precautions	Do not flush into sewers or watercourses.
Method for Cleaning Up	Confirm there is no source of fire and if there is a source, remove it. Sweep up spilled powder slowly and clean remainder with wet cloth.

Section 7. Handling and Storage

Handling	Do not handle in areas where there is wind or draught, this may cause dust to get into eyes. Avoid breathing in dust. Keep out of reach of children.
Storage	Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35 degrees centigrade for a long time. Avoid direct sunlight. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Technical Measures	Use adequate ventilation. None required with intended use.		
Personal Protection Equipment(s)			
Respiratory Protection	None required under normal use. If the limit of exposure concentration is exceeded, use respirator.		
Eye/Face Protection	None required under normal use. Put on goggles if necessary.		
Hand/Skin/Body Protection	None required under normal use. Use vinyl or rubber gloves if necessary. Wear chemical-resistant apron or other impervious clothing if necessary.		
Hygiene Measures	Wash hands after handling.		
Control Parameters	USA OSHA PEL (TWA)	15mg/m ³ (Total dust)	5.0mg/m ³ (Respirable fraction)
	ACGIH TLV (TWA)	10mg/m ³ (Inhalable fraction)	3.0mg/m ³ (Respirable fraction)
	DFG MAK	4.0mg.m ³ (Total dust)	1.5mg/m ³ (Respirable fraction)

Section 9. Physical and Chemical Properties

Appearance	Black fine powder	Decomposition Temperature (Deg. C)	N.A.
Odor	Slightly plastic odor	Flash Point	N.A.
pH	N.A.	Vapor Pressure(Pa)	N.A.
Boiling Point	N.A.	Vapor Density(AIR=1)	N.A.
Melting Point	110Deg.C	Density(g/cm ³)(Measuring Temp: 25DegC)	Approx 1.2
Water Solubility(g/L)	Insoluble	Flammability	Not Flammable
Chloroform solubility(g/L)	Slightly soluble	Viscosity(Pa*s)	N.A.
Octanol/Water Partition Coefficient	N.A.	Volatile(%)	0.2 or below
Explosion Properties	This product is considered a nonexplosive material under normal use.		

Section 10. Stability and Reactivity

Stability/Reactivity	Stable under normal use.
Hazardous Reaction	Dust explosion, like most finely grained organic powders.
Conditions to Avoid	Not applicable under normal use.
Materials of Avoid	Not applicable under normal use.
Hazardous Decomposition Products	Decomposition products will not occur.

Section 11. Toxicological Information

Acute oral toxicity (LD50)	5000 or over (Rat) (Based on other product test results of similar ingredients.)
Acute dermal toxicity	No data available.
Acute inhalation toxicity	No data available.
Local effects	
Acute skin irritation(PII)	1.0 or below (Rabbit) (Based on other product test results of similar ingredients.)
Acute eye irritation	Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)
Sensitization	
Acute Allergenic Effects	0%(Marmot)(Based on other product test results of similar ingredients.)
Specific Effects	
Carcinogenicity	Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat. But oral/skin test does not show carcinogenicity. The toner containing carbon black did not show carcinogenicity in chronic inhalation exposure test in use of rat.
Mutagenicity	Negative(Ames Test)
Reproduction toxicity	Does not contain substances listed as hazardous to reproductive health.

Section 12. Ecological Information

Mobility	No data are available on any adverse effects on the environment.
Persistence/Degradability	Not available.
Bioaccumulation	Not available.
Ecotoxicity	
Acute toxicity for Fish(LC50)	Not classified as toxic (EU Directive 1999/45/EC).
Acute toxicity for Daphnia(EC50)	Not classified as toxic (EU Directive 1999/45/EC).
Algae Inhibition Test(IC50)	Not classified as toxic (EU Directive 1999/45/EC).

Section 13. Disposal Considerations

General Information	Dispose of waste and residues in accordance with local authority requirements.
Disposal Methods	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.
Precautions	Do not throw toner cartridge or toner into an open flame. Hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

International Regulations	
Land Transport	
RID/ADR	Not applicable
DOT 49 CFR	Not applicable
ADNR	Not applicable
Sea Transport	
IMDG Code	Not applicable
Air Transport	
ICAO-TI/ATA-DGR	Not applicable
The UN Classification Number	Not applicable
Specific Precautionary Transport Measures and conditions	
Avoid direct sunlight in quality.	

Section 15. Regulatory Information

EU Information

Label information according to the Directives 1999/45/EC and 67/548/EEC.

Symbols and Indications	Not required
R-Phrase	Not required
S-Phrase	Not required
Special Precautions under 1999/45/EC Annex V:	Not required
76/769/EEC	This product complies with applicable rules and regulations under 76/769/EEC.
304/2003/EC	Not regulated

US Information

Information on the label	Not required
TSCA (Toxic Substances Control Act)	This toner complies with all applicable rules and regulations under TSCA.
SARA Title III	313 Reportable Ingredients: Not regulated California Proposition 65: Not regulated

Canada Information WHMIS Controlled product: Not a controlled product.

Section 16. Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health: 1, Flammability: 1, Reactivity: 0

HMIS Rating: The National Paint and Coating Association (USA)

Health: 1, Flammability: 1, Reactivity: 0

Literature References:

- ANSI Z400.1-1993
- ISO 11014-1

IARC(1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261
 H.Muhle, B.Bellman, O. Creutzenberg, C. Dasenbrock, H. Emst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka and R. Mermelstein(1991) "Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats"
 Fundamental and Applied Toxicology 17, pp280-299
 IARC(2008)"IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol93"
 NIOSH CURRENT INTELLIGENCE BULLETIN"Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

ACGIH-TLV	Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
OSHA Z-Tables	US Department of Labor, 29CFR Part 1910, Tables Z-1, Z-2 and Z-3
NTP (USA)	US Department of Health and Human Services National Toxicology Program Annual Report on Carcinogens
DFG-MAK	DFG List of MAK and BAT Value
Symbol (EC)	EU Directive 67/548/EEC
91/155/EEC	EU Directive 91/155/EEC
1999/45/EC Annex V	EU Directive 1999/45/EC
76/769/EEC	EU Directive 76/769/EEC
EC 304/2003	Regulation (EC) No 304/2003 of the European Parliament and of the Council of 28 January 2003 concerning the export and import of dangerous chemicals.
WHMIS Controlled product	Canada Workplace Hazardous Information System
OELs-TWA (Australia)	Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)]

Abbreviations:

OSHA PEL	PEL (Permissible Exposure Limit) under Occupational Safety and Health Act.
ACGIH-TLV	TLV (Threshold Limit Values) under American Conference of Governmental Industrial Hygienists
DRG-MAK	MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft
RoHS	Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment.
TWA	Time Weighted Average
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
WHMIS	Workplace Hazardous Information System
NOHSC	National Occupational Health and Safety Commission Act 1985.

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Cyan Toner For FS-C1020MFP**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date April 27, 2010

Section 2. Composition/Information on Ingredients

Substance or preparation: Preparation

CAS No.	(Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	Weight %
	Polyester Resin 1			40-60
	Polyester Resin 2			30-50
CAS No. 147-14-8)	Organic Pigment			1-10
	Wax			1-5
	Silica			1-5
	Organic Salt			1-5

This product does not contain any of the following substances as ingredients. And if it contains any impurities, it does not exceed any of the thresholds of RoHS: Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE).

Section 3. Hazards Identification

Most Important Hazards

Adverse Human Health Effects There are no significant hazards expected with intended use.
Environmental Effects There are no significant hazards expected with intended use.
Physical and Chemical Hazards There are no significant hazards expected with intended use.
Specific Hazards Dust explosion (like most finely grained organic powders).

Main Symptoms

Acute Inhalation Toxicity Exposure to excessive amount of dust may cause physical irritation to respiratory tract.
Acute Oral Toxicity Low acute toxicity in animal experiment.
Acute Eye Irritation May cause slight transient irritation.
Acute Skin Irritation May be non-irritant

Sensitization

From test no apparent significant hazards are expected. (Only few cases reported on incidental allergy-related conjunctivitis or dermatitis).

Chronic Effect

Slight pulmonary fibrosis has been reported in rats upon chronic inhalation exposure to a toner at 4mg/m³ every day for 2 years. No pulmonary change was found at 1mg/m³. These findings show that exposure to excessive amounts of powder may cause damage to lungs. However, normal use and handling of this product as intended, does not result in inhalation of excessive amounts of powder.

Carcinogenicity

This product does not contain the substances classified as carcinogenic by NTP, IARC or OSHA.

The Classification of the Chemical Product

This preparation is not classified as dangerous according to Directive 1999/45/EC.

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air and gargle with plenty of water. Seek medical treatment in case of such a symptom as coughing.
Skin Contact	Wash with soap and water.
Eye Contact	Flush with water immediately and seek medical treatment if irritating.
Ingestion	Drink several glasses of water to dilute ingested toner. Seek medical treatment.

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, Powder, CO ₂ or Dry Chemical Extinguisher.
Extinguishing Media to Avoid	Not applicable.
Specific Hazards	Can form explosive dust-air mixtures when finely dispersed in air.
Specific Method	No special fire protecting method is required. Sprinkling or fire extinguishers can be used.
Protection of Fire-Fighters	Wear gloves, glasses, a mask if necessary.

Section 6. Accidental Release Measures

Personal Precautions	Do not breathe in dust.
Environmental Precautions	Do not flush into sewers or watercourses.
Method for Cleaning Up	Confirm there is no source of fire and if there is a source, remove it. Sweep up spilled powder slowly and clean remainder with wet cloth.

Section 7. Handling and Storage

Handling	Do not handle in areas where there is wind or draught, this may cause dust to get into eyes. Avoid breathing in dust. Keep out of reach of children.
Storage	Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35 degrees centigrade for a long time. Avoid direct sunlight. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Technical Measures	Use adequate ventilation. None required with intended use.		
Personal Protection Equipment(s)	None required under normal use. If the limit of exposure concentration is exceeded, use respirator.		
Respiratory Protection	None required under normal use. Put on goggles if necessary.		
Eye/Face Protection	None required under normal use. Use vinyl or rubber gloves if necessary. Wear chemical-resistant apron or other impervious clothing if necessary.		
Hand/Skin/Body Protection	None required under normal use. Use vinyl or rubber gloves if necessary. Wear chemical-resistant apron or other impervious clothing if necessary.		
Hygiene Measures	Wash hands after handling.		
Control Parameters	USA OSHA PEL (TWA)	15mg/m ³ (Total dust)	5.0mg/m ³ (Respirable fraction)
	ACGIH TLV (TWA)	10mg/m ³ (Inhalable fraction)	3.0mg/m ³ (Respirable fraction)
	DFG MAK	4.0mg.m ³ (Total dust)	1.5mg/m ³ (Respirable fraction)

Section 9. Physical and Chemical Properties

Appearance	Cyan fine powder	Decomposition Temperature (Deg. C)	N.A.
Odor	Slightly plastic odor	Flash Point	N.A.
pH	N.A.	Vapor Pressure(Pa)	N.A.
Boiling Point (Deg. C)	N.A.	Vapor Density(AIR=1)	N.A.
Melting Point	110°C	Density(g/cm ³)(Measuring Temp: 25Deg C.)	Approx 1.2
Water Solubility(g/L)	Insoluble	Viscosity(Pa*s)	N.A.
Chloroform solubility(g/L)	Slightly soluble	Volatile(%)	0.2 or below
Octanol/Water Partition Coefficient	N.A.		
Flammability	Not Flammable		
Explosion Properties	This product is considered a nonexplosive material under normal use.		

Section 10. Stability and Reactivity

Stability/Reactivity	Stable under normal use.
Hazardous Reaction	Dust explosion, like most finely grained organic powders.
Conditions to Avoid	Not applicable under normal use.
Materials of Avoid	Not applicable under normal use.
Hazardous Decomposition Products	Decomposition products will not occur.

Section 11. Toxicological Information

Acute oral toxicity (LD50)	5000 or over (Rat) (Based on other product test results of similar ingredients.)
Acute dermal toxicity	No data available.
Acute inhalation toxicity	No data available.
Local effects	
Acute skin irritation(PII)	1.0 or below (Rabbit) (Based on other product test results of similar ingredients.)
Acute eye irritation	Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)
Sensitization	
Acute Allergenic Effects	0%(Marmot)(Based on other product test results of similar ingredients.)
Specific Effects	
Carcinogenicity	This product does not contain the carcinogenic substances which are listed on NTP, IARC and OSHA.
Mutagenicity	Negative(Ames Test)
Reproduction toxicity	Does not contain substances listed as hazardous to reproductive health.

Section 12. Ecological Information

Mobility	No data are available on any adverse effects on the environment.
Persistence/Degradability	Not available.
Bioaccumulation	Not available.
Ecotoxicity	
Acute toxicity for Fish(LC50)	Not classified as toxic (EU Directive 1999/45/EC).
Acute toxicity for Daphnia(EC50)	Not classified as toxic (EU Directive 1999/45/EC).
Algae Inhibition Test(IC50)	Not classified as toxic (EU Directive 1999/45/EC).

Section 13. Disposal Considerations

General Information	Dispose of waste and residues in accordance with local authority requirements.
Disposal Methods	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.
Precautions	Do not throw toner cartridge or toner into an open flame. Hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

International Regulations	
Land Transport	
RID/ADR	Not applicable
DOT 49 CFR	Not applicable
ADNR	Not applicable
Sea Transport	
IMDG Code	Not applicable
Air Transport	
ICAO-TI/IATA-DGR	Not applicable
The UN Classification Number	Not applicable
Specific Precautionary Transport Measures and conditions	
Avoid direct sunlight in quality.	



MATERIAL SAFETY DATA SHEET

Section 15. Regulatory Information

EU Information

Label information according to the Directives 1999/45/EC and 67/548/EEC.

Symbols and Indications	Not required
R-Phrase	Not required
S-Phrase	Not required
Special Precautions under 1999/45/EC Annex V:	Not required
76/769/EEC	This product complies with applicable rules and regulations under 76/769/EEC.
304/2003/EC	Not regulated

US Information

Information on the label	Not required
TSCA (Toxic Substances Control Act)	This toner complies with all applicable rules and regulations under TSCA.
SARA Title III	313 Reportable Ingredients: Not regulated California Proposition 65: Not regulated

Canada Information

WHMIS Controlled product: Not a controlled product.

Section 16. Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health: 1, Flammability: 1, Reactivity: 0

HMIS Rating: The National Paint and Coating Association (USA)

Health: 1, Flammability: 1, Reactivity: 0

Literature References:

- ANSI Z400.1-1993
- ISO 11014-1

IARC(1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261
 H.Muhle, B.Bellman, O. Creutzenberg, C. Dasenbrock, H. Emst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka and R. Mermelstein(1991)
 Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats"
 Fundamental and Applied Toxicology 17, pp280-299
 IARC(2008)"IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol93"
 NIOSH CURRENT INTELLIGENCE BULLETIN"Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

ACGIH-TLV	Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
OSHA Z-Tables	US Department of Labor, 29CFR Part 1910, Tables Z-1, Z-2 and Z-3
NTP (USA)	US Department of Health and Human Services National Toxicology Program Annual Report on Carcinogens
DFG-MAK	DFG List of MAK and BAT Value
Symbol (EC)	EU Directive 67/548/EEC
91/155/EEC	EU Directive 91/155/EEC
1999/45/EC Annex V	EU Directive 1999/45/EC
76/769/EEC	EU Directive 76/769/EEC
EC 304/2003	Regulation (E) No 304/2003 of the European Parliament and of the Council of 28 January 2003 concerning the export and import of dangerous chemicals.
WHMIS Controlled product	Canada Workplace Hazardous Information System
OELs-TWA (Australia)	Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1951)]

Abbreviations:

OSHA PEL	PEL (Permissible Exposure Limit) under Occupational Safety and Health Act.
ACGIH-TLV	TLV (Threshold Limit Values) under American Conference of Governmental Industrial Hygienists
DRG-MAK	MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft
RoHS	Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment.
TWA	Time Weighted Average
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
WHMIS	Workplace Hazardous Information System
NOHSC	National Occupational Health and Safety Commission Act 1985.

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Magenta Toner For FS-C1020MFP**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
225 Sand Road
Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date April 27, 2010

Section 2. Composition/Information on Ingredients

Substance or preparation: Preparation

CAS No.	(Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	Weight %
	Polyester Resin 1			40-60
	Polyester Resin 2			30-50
CAS No. 67990-05-0)	Organic Pigment			1-10
	Wax			1-5
	Silica			1-5
	Organic Salt			1-5

This product does not contain any of the following substances as ingredients. And if it contains any impurities, it does not exceed any of the thresholds of RoHS: Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE).

Section 3. Hazards Identification

Most Important Hazards

Adverse Human Health Effects There are no significant hazards expected with intended use.
Environmental Effects There are no significant hazards expected with intended use.
Physical and Chemical Hazards There are no significant hazards expected with intended use.
Specific Hazards Dust explosion (like most finely grained organic powders).

Main Symptoms

Acute Inhalation Toxicity Exposure to excessive amount of dust may cause physical irritation to respiratory tract.
Acute Oral Toxicity Low acute toxicity in animal experiment.
Acute Eye Irritation May cause slight transient irritation.
Acute Skin Irritation May be non-irritant

Sensitization

From test no apparent significant hazards are expected. (Only few cases reported on incidental allergy-related conjunctivitis or dermatitis).

Chronic Effect

Slight pulmonary fibrosis has been reported in rats upon chronic inhalation exposure to a toner at 4mg/m³ every day for 2 years. No pulmonary change was found at 1mg/m³. These findings show that exposure to excessive amounts of powder may cause damage to lungs. However, normal use and handling of this product as intended, does not result in inhalation of excessive amounts of powder.

Carcinogenicity

This product does not contain the substances classified as carcinogenic by NTP, IARC or OSHA.

The Classification of the Chemical Product

This preparation is not classified as dangerous according to Directive 1999/45/EC.

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air and gargle with plenty of water. Seek medical treatment in case of such a symptom as coughing.
Skin Contact	Wash with soap and water.
Eye Contact	Flush with water immediately and seek medical treatment if irritating.
Ingestion	Drink several glasses of water to dilute ingested toner. Seek medical treatment.

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, Powder, CO ₂ or Dry Chemical Extinguisher.
Extinguishing Media to Avoid	Not applicable.
Specific Hazards	Can form explosive dust-air mixtures when finely dispersed in air.
Specific Method	No special fire protecting method is required. Sprinkling or fire extinguishers can be used.
Protection of Fire-Fighters	Wear gloves, glasses, a mask if necessary.

Section 6. Accidental Release Measures

Personal Precautions	Do not breathe in dust.
Environmental Precautions	Do not flush into sewers or watercourses.
Method for Cleaning Up	Confirm there is no source of fire and if there is a source, remove it. Sweep up spilled powder slowly and clean remainder with wet cloth.

Section 7. Handling and Storage

Handling	Do not handle in areas where there is wind or draught, this may cause dust to get into eyes. Avoid breathing in dust. Keep out of reach of children.
Storage	Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35 degrees centigrade for a long time. Avoid direct sunlight. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Technical Measures	Use adequate ventilation. None required with intended use.		
Personal Protection Equipment(s)	None required under normal use. If the limit of exposure concentration is exceeded, use respirator.		
Respiratory Protection	None required under normal use. Put on goggles if necessary.		
Eye/Face Protection	None required under normal use. Use vinyl or rubber gloves if necessary. Wear chemical-resistant apron or other impervious clothing if necessary.		
Hand/Skin/Body Protection			
Hygiene Measures	Wash hands after handling.		
Control Parameters	USA OSHA PEL (TWA)	15mg/m ³ (Total dust)	5.0mg/m ³ (Respirable fraction)
	ACGIH TLV (TWA)	10mg/m ³ (Inhalable fraction)	3.0mg/m ³ (Respirable fraction)
	DFG MAK	4.0mg.m ³ (Total dust)	1.5mg/m ³ (Respirable fraction)

Section 9. Physical and Chemical Properties

Appearance	Magenta fine powder	Decomposition Temperature (Deg. C)	N.A.
Odor	Slightly plastic odor	Flash Point	N.A.
pH	N.A.	Vapor Pressure(Pa)	N.A.
Boiling Point (Deg. C)	N.A.	Vapor Density(AIR=1)	N.A.
Melting Point	110°C	Density(g/cm ³)(Measuring Temp: 25Deg C.)	Approx 1.2
Water Solubility(g/L)	Insoluble	Viscosity(Pa*s)	N.A.
Chloroform solubility(g/L)	Slightly soluble	Volatile(%)	0.2 or below
Octanol/Water Partition Coefficient	N.A.		
Flammability	Not Flammable		
Explosion Properties	This product is considered a nonexplosive material under normal use.		

Section 10. Stability and Reactivity

Stability/Reactivity	Stable under normal use.
Hazardous Reaction	Dust explosion, like most finely grained organic powders.
Conditions to Avoid	Not applicable under normal use.
Materials of Avoid	Not applicable under normal use.
Hazardous Decomposition Products	Decomposition products will not occur.

Section 11. Toxicological Information

Acute oral toxicity (LD50)	5000 or over (Rat) (Based on other product test results of similar ingredients.)
Acute dermal toxicity	No data available.
Acute inhalation toxicity	No data available.
Local effects	
Acute skin irritation(PII)	1.0 or below (Rabbit) (Based on other product test results of similar ingredients.)
Acute eye irritation	Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)
Sensitization	
Acute Allergenic Effects	0%(Marmot)(Based on other product test results of similar ingredients.)
Specific Effects	
Carcinogenicity	This product does not contain the carcinogenic substances which are listed on NTP, IARC and OSHA.
Mutagenicity	Negative(Ames Test)
Reproduction toxicity	Does not contain substances listed as hazardous to reproductive health.

Section 12. Ecological Information

Mobility	No data are available on any adverse effects on the environment.
Persistence/Degradability	Not available.
Bioaccumulation	Not available.
Ecotoxicity	
Acute toxicity for Fish(LC50)	Not classified as toxic (EU Directive 1999/45/EC).
Acute toxicity for Daphnia(EC50)	Not classified as toxic (EU Directive 1999/45/EC).
Algae Inhibition Test(IC50)	Not classified as toxic (EU Directive 1999/45/EC).

Section 13. Disposal Considerations

General Information	Dispose of waste and residues in accordance with local authority requirements.
Disposal Methods	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.
Precautions	Do not throw toner cartridge or toner into an open flame. Hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

International Regulations	
Land Transport	
RID/ADR	Not applicable
DOT 49 CFR	Not applicable
ADNR	Not applicable
Sea Transport	
IMDG Code	Not applicable
Air Transport	
ICAO-TI/IATA-DGR	Not applicable
The UN Classification Number	Not applicable
Specific Precautionary Transport Measures and conditions	
Avoid direct sunlight in quality.	

Section 15. Regulatory Information

EU Information

Label information according to the Directives 1999/45/EC and 67/548/EEC.

Symbols and Indications	Not required
R-Phrase	Not required
S-Phrase	Not required
Special Precautions under 1999/45/EC Annex V:	Not required
76/769/EEC	This product complies with applicable rules and regulations under 76/769/EEC.
304/2003/EC	Not regulated

US Information

Information on the label	Not required
TSCA (Toxic Substances Control Act)	This toner complies with all applicable rules and regulations under TSCA.
SARA Title III	313 Reportable Ingredients: Not regulated California Proposition 65: Not regulated

Canada Information WHMIS Controlled product: Not a controlled product.

Section 16. Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health: 1, Flammability: 1, Reactivity: 0

HMIS Rating: The National Paint and Coating Association (USA)

Health: 1, Flammability: 1, Reactivity: 0

Literature References:

- ANSI Z400.1-1993
- ISO 11014-1

IARC(1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261
 H.Muhle, B.Bellman, O. Creutzenberg, C. Dasenbrock, H. Emst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka and R. Mermelstein(1991) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats"
 Fundamental and Applied Toxicology 17, pp280-299
 IARC(2008)"IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol93"
 NIOSH CURRENT INTELLIGENCE BULLETIN"Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

ACGIH-TLV	Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
OSHA Z-Tables	US Department of Labor, 29CFR Part 1910, Tables Z-1, Z-2 and Z-3
NTP (USA)	US Department of Health and Human Services National Toxicology Program Annual Report on Carcinogens
DFG-MAK	DFG List of MAK and BAT Value
Symbol (EC)	EU Directive 67/548/EEC
91/155/EEC	EU Directive 91/155/EEC
1999/45/EC Annex V	EU Directive 1999/45/EC
76/769/EEC	EU Directive 76/769/EEC
EC 304/2003	Regulation (E) No 304/2003 of the European Parliament and of the Council of 28 January 2003 concerning the export and import of dangerous chemicals.
WHMIS Controlled product	Canada Workplace Hazardous Information System
OELs-TWA (Australia)	Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1951)]

Abbreviations:

OSHA PEL	PEL (Permissible Exposure Limit) under Occupational Safety and Health Act.
ACGIH-TLV	TLV (Threshold Limit Values) under American Conference of Governmental Industrial Hygienists
DRG-MAK	MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft
RoHS	Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment.
TWA	Time Weighted Average
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
WHMIS	Workplace Hazardous Information System
NOHSC	National Occupational Health and Safety Commission Act 1985.

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Yellow Toner For FS-C1020MFP**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
225 Sand Road
Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date April 27, 2010

Section 2. Composition/Information on Ingredients

Substance or preparation: Preparation

CAS No.	(Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	Weight %
	Polyester Resin 1			40-60
	Polyester Resin 2			30-50
CAS No. 77804-81-0)	Organic Pigment			1-10
	Wax			1-5
	Silica			1-5
	Organic Salt			1-5

This product does not contain any of the following substances as ingredients. And if it contains any impurities, it does not exceed any of the thresholds of RoHS: Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE).

Section 3. Hazards Identification

Most Important Hazards

Adverse Human Health Effects There are no significant hazards expected with intended use.
Environmental Effects There are no significant hazards expected with intended use.
Physical and Chemical Hazards There are no significant hazards expected with intended use.
Specific Hazards Dust explosion (like most finely grained organic powders).

Main Symptoms

Acute Inhalation Toxicity Exposure to excessive amount of dust may cause physical irritation to respiratory tract.
Acute Oral Toxicity Low acute toxicity in animal experiment.
Acute Eye Irritation May cause slight transient irritation.
Acute Skin Irritation May be non-irritant

Sensitization

From test no apparent significant hazards are expected. (Only few cases reported on incidental allergy-related conjunctivitis or dermatitis).

Chronic Effect

Slight pulmonary fibrosis has been reported in rats upon chronic inhalation exposure to a toner at 4mg/m³ every day for 2 years. No pulmonary change was found at 1mg/m³. These findings show that exposure to excessive amounts of powder may cause damage to lungs. However, normal use and handling of this product as intended, does not result in inhalation of excessive amounts of powder.

Carcinogenicity

This product does not contain the substances classified as carcinogenic by NTP, IARC or OSHA.

The Classification of the Chemical Product

This preparation is not classified as dangerous according to Directive 1999/45/EC.

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air and gargle with plenty of water. Seek medical treatment in case of such a symptom as coughing.
Skin Contact	Wash with soap and water.
Eye Contact	Flush with water immediately and seek medical treatment if irritating.
Ingestion	Drink several glasses of water to dilute ingested toner. Seek medical treatment.

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, Powder, CO ₂ or Dry Chemical Extinguisher.
Extinguishing Media to Avoid	Not applicable.
Specific Hazards	Can form explosive dust-air mixtures when finely dispersed in air.
Specific Method	No special fire protecting method is required. Sprinkling or fire extinguishers can be used.
Protection of Fire-Fighters	Wear gloves, glasses, a mask if necessary.

Section 6. Accidental Release Measures

Personal Precautions	Do not breathe in dust.
Environmental Precautions	Do not flush into sewers or watercourses.
Method for Cleaning Up	Confirm there is no source of fire and if there is a source, remove it. Sweep up spilled powder slowly and clean remainder with wet cloth.

Section 7. Handling and Storage

Handling	Do not handle in areas where there is wind or draught, this may cause dust to get into eyes. Avoid breathing in dust. Keep out of reach of children.
Storage	Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35 degrees centigrade for a long time. Avoid direct sunlight. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Technical Measures	Use adequate ventilation. None required with intended use.		
Personal Protection Equipment(s)	None required under normal use. If the limit of exposure concentration is exceeded, use respirator.		
Respiratory Protection	None required under normal use. Put on goggles if necessary.		
Eye/Face Protection	None required under normal use. Use vinyl or rubber gloves if necessary. Wear chemical-resistant apron or other impervious clothing if necessary.		
Hand/Skin/Body Protection			
Hygiene Measures	Wash hands after handling.		
Control Parameters	USA OSHA PEL (TWA)	15mg/m ³ (Total dust)	5.0mg/m ³ (Respirable fraction)
	ACGIH TLV (TWA)	10mg/m ³ (Inhalable fraction)	3.0mg/m ³ (Respirable fraction)
	DFG MAK	4.0mg.m ³ (Total dust)	1.5mg/m ³ (Respirable fraction)

Section 9. Physical and Chemical Properties

Appearance	Yellow fine powder	Decomposition Temperature (Deg. C)	N.A.
Odor	Slightly plastic odor	Flash Point	N.A.
pH	N.A.	Vapor Pressure(Pa)	N.A.
Boiling Point (Deg. C)	N.A.	Vapor Density(AIR=1)	N.A.
Melting Point	110°C	Density(g/cm ³)(Measuring Temp: 25Deg C.)	Approx 1.2
Water Solubility(g/L)	Slightly soluble	Viscosity(Pa*s)	N.A.
Chloroform solubility(g/L)	Slightly soluble	Volatile(%)	0.2 or below
Octanol/Water Partition Coefficient	N.A.		
Flammability	Not Flammable		
Explosion Properties	This product is considered a nonexplosive material under normal use.		

Section 10. Stability and Reactivity

Stability/Reactivity	Stable under normal use.
Hazardous Reaction	Dust explosion, like most finely grained organic powders.
Conditions to Avoid	Not applicable under normal use.
Materials of Avoid	Not applicable under normal use.
Hazardous Decomposition Products	Decomposition products will not occur.

Section 11. Toxicological Information

Acute oral toxicity (LD50)	5000 or over (Rat) (Based on other product test results of similar ingredients.)
Acute dermal toxicity	No data available.
Acute inhalation toxicity	No data available.
Local effects	
Acute skin irritation(PII)	1.0 or below (Rabbit) (Based on other product test results of similar ingredients.)
Acute eye irritation	Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)
Sensitization	
Acute Allergenic Effects	0%(Marmot)(Based on other product test results of similar ingredients.)
Specific Effects	
Carcinogenicity	This product does not contain the carcinogenic substances which are listed on NTP, IARC and OSHA.
Mutagenicity	Negative(Ames Test)
Reproduction toxicity	Does not contain substances listed as hazardous to reproductive health.

Section 12. Ecological Information

Mobility	No data are available on any adverse effects on the environment.
Persistence/Degradability	Not available.
Bioaccumulation	Not available.
Ecotoxicity	
Acute toxicity for Fish(LC50)	Not classified as toxic (EU Directive 1999/45/EC).
Acute toxicity for Daphnia(EC50)	Not classified as toxic (EU Directive 1999/45/EC).
Algae Inhibition Test(IC50)	Not classified as toxic (EU Directive 1999/45/EC).

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General Information	Dispose of waste and residues in accordance with local authority requirements.
Disposal Methods	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.
Precautions	Do not throw toner cartridge or toner into an open flame. Hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

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Land Transport	
RID/ADR	Not applicable
DOT 49 CFR	Not applicable
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IMDG Code	Not applicable
Air Transport	
ICAO-TI/IATA-DGR	Not applicable
The UN Classification Number	Not applicable
Specific Precautionary Transport Measures and conditions	
Avoid direct sunlight in quality.	

Section 15. Regulatory Information

EU Information

Label information according to the Directives 1999/45/EC and 67/548/EEC.

Symbols and Indications	Not required
R-Phrase	Not required
S-Phrase	Not required
Special Precautions under 1999/45/EC Annex V:	Not required
This product complies with applicable rules and regulations under 76/769/EEC.	
76/769/EEC	This product complies with applicable rules and regulations under 76/769/EEC.

US Information

Information on the label	Not required
TSCA (Toxic Substances Control Act)	This toner complies with all applicable rules and regulations under TSCA.
SARA Title III	313 Reportable Ingredients: Not regulated California Proposition 65: Not regulated

Canada Information WHMIS Controlled product: Not a controlled product.

Section 16. Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health: 1, Flammability: 1, Reactivity: 0

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NOHSC	National Occupational Health and Safety Commission Act 1985.

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End of MSDS
